

AP CALCULUS AB

Course Policies

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RATIONALE

You should find that your first course in calculus is a bit different than the mathematics to which you have become accustomed. In particular you should find that visualization and active thinking become vital parts of your development in calculus. Gone are the days of passive learning—no more “just teach me the rules and shortcuts so that I can get the answer.” You will find that in calculus *sometimes* the procedure is more important than the answer. Calculus is very concept oriented, rather than product oriented. If you recall some of the difficulties that you may have had transitioning from arithmetic to algebra you can anticipate some of the feelings and frustrations that are to be encountered in making the transition from algebra/trigonometry to calculus. As our study and understanding of calculus develops and expands you will begin to realize that it is the key to a better understanding of chemistry and physics, as well as other mathematically based disciplines, just as algebra and trigonometry were the keys to these disciplines at a lower level. Many times the person who expects to pursue a career in a business related field wonders why they are so encouraged to continue their mathematical training to such a high level. The answer is quite simple. At the post secondary level, many business and economics courses are calculus based. As a matter of fact, approximately 50% of all college majors are calculus based! Calculus has traditionally been a subject into which few students have ventured. In the eyes of many students, and teachers, calculus is a subject which is accessible only to the very brilliant. In this class we will shatter that illusion.

The subject matter of this course, and the manner in which it will be taught, will enable the successful student to take the College Board’s Advanced Placement (AP) AB level calculus exam. Some of the topics you will be studying are: limits, infinite sums, derivatives, integrals, and various applications. Successful completion of the AP test means that the student will be eligible to receive credit for having completed a one semester calculus course at most colleges and universities in the country. (All students are encouraged to take the AP exam, but the exam is not required. Students are responsible for paying the fee for the AP exam, but please see the teacher if that is a problem.)

To be successful in Calculus a student must remember, understand and be able to apply the information presented in the previous courses including Algebra I, Algebra II, Geometry, College Algebra and Trigonometry. Thus final grades of A or B in those courses are strongly recommended for students taking Calculus. The first ten lessons will review some of that material, if more is needed please see the teacher for help early in the course.

Historically students who have been most successful in this course and on the AP exam have been those who have been willing to put in a solid effort including coming in for help at the first sign of confusion, or when a class has been missed. To be successful you will need to work well. Lazy habits, such as skipping assignments, not reading the lesson and not taking notes will most likely not lead to success. As a former student said in an email from his first year in college “Well I never thought I would say this but thank you for pushing me so hard in Calculus. I passed the AP test so I’m in Calculus II and I’m doing well. I am doing better than all of the sophomores and juniors in my class and the freshmen who need help come to me for the correct way to do things.”

ATTENDANCE

Regular attendance is **very** important for your success in this course. After an excused absence it will be YOUR responsibility to find out what you missed. If you miss a test or quiz, plan to make it up the day you return. Try to arrange appointments for times that will cause the least interference with this class.

UNEXCUSED ABSENCE/TRUANCY

Any absence that is not listed specifically as an EXCUSED absence will be considered to be unexcused. If the absence is unverified it is the student’s responsibility to follow up on getting it changed to EXCUSED. According to school board policy, makeup work for unexcused absences will receive NO CREDIT (a ZERO) although the knowledge will be required. This includes tests, quizzes and any other assignment.

PRE-ARRANGED ABSENCE

Anytime an absence can be anticipated it should be pre-arranged through the proper channels in the office. Failure to do so may result in that absence being unexcused. It is expected that assignments during a pre-arranged absence are turned in on time. If an assignment is due the day you are gone it should be turned in ahead of time. If an assignment is given the day you are gone, it is expected that the assignment is turned in on time. School field trips and sports related early dismisses are pre-arranged absences. Please check the school calendar when considering vacations if at all possible.

TARDIES

You should be in your proper seat, with your material out and ready to work when the bell rings. Tardiness is not well tolerated. Tardiness is a rude behavior and a sign of disrespect. Tardies will be dealt with by parent communication and/or referrals.

GRADING PROCEDURE

<u>GRADING SCALE</u>			<u>QUARTER GRADE</u>	
<u>1ST SEMESTER</u>		<u>2ND SEMESTER</u>		
80.00 – 100	A	76.00 – 100	Tests	70%
64.00 – 79.99	B	60.00 – 75.99	Assignments	20%
52.00 – 63.99	C	49.00 – 59.99	Quizzes	10%
40.00 – 51.99	D	38.00 – 48.99	<u>SEMESTER GRADE</u>	
0 – 39.99	F	0 – 37.99	Quarter Grade	70%
			Exam	30%

TESTS

During a test your desk must be completely clear of any non-test related material (no notebooks, folders, calculator covers, etc. may be on your desk). Your backpack/book bag will be left in a central location in the room. This will help to eliminate distractions to other students when you are done with your test.

Each semester there will be five tests and a semester exam. The tests will be of equal weight.

First semester tests will begin in a format similar to College Algebra tests (20 questions each worth 5 points). Test # 1 will include five multiple choice questions. Each successive test will include a larger percentage of multiple choice questions. **You must show your work on each test question to receive credit for that question – this includes multiple choice questions.** Beginning with Test # 2, and then every test thereafter, each test will be divided into two sections – a non-calculator section and a calculator active section. Toward the end of first semester you will be introduced to free response questions. Each test covers all previous lessons with major emphasis on the ten lessons since the previous test.

Second semester tests will be only multiple choice and free response. They are graded in the same manner as the AP exam. Blind guessing to answer multiple choice questions could negatively impact your grade (number correct minus one-quarter the number wrong). Leaving an answer blank does not carry the additional penalty. Free response questions are carefully scrutinized for method and procedures; a correct answer with no supporting work earns about 10% of the points possible.

ASSIGNMENTS

Read and take notes on the lesson **before** it is presented in class. Write yourself a note with any concerns or questions you have after the reading. Be sure to ask those questions either during or after the lesson presentation if they are not answered during the presentation. There may be unannounced quiz questions for which you may use those notes. In class add to or amend those notes to help with your studying.

An assignment will accompany most non-test days. The assignment will usually be due the next non-test day after it is assigned. Questions can be asked the day the assignment is due.

It is your responsibility to do all the assigned work and learn from doing this work. Answers with no accompanying work will not receive credit. All answers are available either in the back of the book or on the web. Copying from a solutions manual will most likely cause problems on test day. Trying the problems and THEN checking the solutions is a much wiser choice. Late assignments are NOT accepted. Please be sure to do your assignments in the manner described in class.

QUIZZES

Short quizzes will be given occasionally. They could include questions from the notes, problems similar to or directly from a problem set, multiple choice, free response, or written response questions.

REQUIRED MATERIALS

1. Three ring binder notebook (Organization will be a tremendous asset to you.)
2. Filler paper. If you use spiral notebook paper be sure to remove the fringe “yuckies” **before** turning the paper in. Yuckies go in the recycle bin, not on the floor.
3. Pencils and **good** erasers (I will not be responsible for bad erasure marks on scantron forms) or pens. ALL test or quiz work for this class must be done neatly, using a pencil (that's the requirement on the AP exam, so get used to it).
4. Graphing calculator. The AP Calculus exam in May **requires** a graphing calculator, and scientific calculators are forbidden, as are TI-92 calculators and others with a QWERTY keyboard. Only calculators approved for the AP exam will be allowed in this class. A graphing calculator will be required on tests in this class. **On a test or quiz calculators may not be shared.** Most classroom instruction will be done with a TI-84.

CLASSROOM CONDUCT

You are young adults — I will expect you to behave as such. Inappropriate talking or behavior during class will not be tolerated. I expect your cooperation in maintaining an appropriate teaching/learning/studying environment at all times. As this is a calculus course I expect to see only calculus work being done.

Food and drink (with the exception of water) are not allowed in the classroom. Gum is acceptable, as long as it does not distract from the work of the class or end up under a desk.

Passes to leave class to use the restroom will be on an emergency only basis. There will be no passes during the first or last ten minutes of class, nor will there be passes to the lockers or vending machines. If you do use a pass, you must sign out when you leave and back in when you return. You must have a pass from counseling to go there during class. The bell at the end of the period is a signal for me to finish my statement and excuse you; the teacher dismisses the class, not the bell.

The only acceptable electronic device in the classroom is a graphing calculator. Cell phones should be turned off and out of reach until the end of the period. Using an electronic device without permission could result in parent contact and/or a referral.

If there is ever any evidence of cheating on any work done for this class, **all** involved will receive a ZERO, a phone-call home, and a written referral.

INDIVIDUAL HELP

Some difficulties ARE expected from EVERYONE at some point during the course. When you find yourself beginning to have difficulty take appropriate action. Extra help will be available on an almost daily basis before school, Monday and Wednesday after school beginning in November (I coach in the fall), and during Mustang 55.

GOOD LUCK, may the course be with you.

Calculus was not invented in a single day – don't try to learn that way.

Don't learn the tricks of the trade at the expense of learning the trade.

Smart IS NOT something you are, it's something you achieve.

EXCELLENCE IS FOR EVERYONE !!!